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"Keep A-Tryin'" Signboards.

"My boy," said Uncle Hiram, "you'll soon be starting out,
To drive o'er Life's long roadway, and oft a bit of doubt
Will puzzle you completely, as to which you'd best pursue
Of branching ways, when roads fork out, as they're inclined to do.
Each bears the equal marks of well-worn travel, like as not,
And so, one's undecided which he'd better choose to trot;
But I have learned the route, my boy, and thus much I'll confess—
The 'Keep a-tryin' ' signboards mark the highway to Success.

"Success is such a pretty town—to reach it, all men strive;
You'll find the crowd, though, growing less, the farther on you drive—
For many, seeking shorter cuts through Dilly-dally Lane,
Get so far off the highway that they find it ne'er again!
You'll be allured, as on you go, by finger-posts that say:
'Take Chance's Road, past Waltingville, it's far the better way;'
But I this safer route would fain upon your mind impress—
The 'Keep a-tryin' ' signboards mark the highway to Success.

"The road that runs through Waltingville has prospects bright and fair,
When first you start, but, farther on, it leads through swamps of Care,
And, after that, you'll have to climb the weary hill of Debt;
Then, still beyond, there looms in view the tollgate of Regret.
And so, my boy, when starting on the road of Life, alone,
The route your Uncle Hiram chose I trust you'll make your own,
And heed his plain directions, if you'd quite avoid distress;
The 'Keep a-tryin' ' signboards mark the highway to Success.

—Roy Farrell Greene, in Success.

A SEQUOIA DRYAD

By ETHEL WATTS MUMFORD.

DERRINGER thought he had a good thing when he bought up the timber rights of Cleopatra canyon. The grade was down all the way to the opening and the inlet made up close to the hills. Nothing easier than to swing the great redwood sections on the waiting freighter and transport them to Monterey, where the cheap Jap laborers could put on the finishing polish, convert huge slabs of rough timber to shining monolithic table tops—for that was his scheme, round tables, such as King Arthur would have envied. Already his friends—artists, decorators and millionaires in the country places, had filled his pocket with orders, and he could clear up a tidy little sum which he needed sadly. One acquisition he made, however, upon which he had not counted—the Dryad. He first saw her the day he brought up his men and tools and set them to building shacks by the spring side. She advanced to meet him from the trunk of a giant sequoia, with a hesitating, nervous step, paused some ten feet away and observed him. In turn he scrutinized her singular person. She was tall and sinewy, and her powerful shoulders were draped in an old Spanish shawl of Chinese crepe—a black ground embroidered in colors—a tattered skirt of dark silk hung below, and was gathered full at the waist after the ante-bellum fashion of California. The Dryad's face was haunting, white and hard like ivory, but cut by a strangely scarlet mouth that made a sudden dash of color in its pallid oval. Black eyes that burned slumberously drew down waxen lids to hide their fire, and black brows met in a straight line over a thin aquiline nose. Derringer looked, and his flesh crawled. She continued to watch him in silence. He wet his lips thrice, and then managed at last to speak.

"Who are you—and what do you want?"

"I am Carmelita," she answered, in Spanish. "What are you come for?"

"The timber," he answered, roughly; "what business is that of yours?"

She looked at him sullenly. "What for? You cannot move them; they are fast as the hills—and they do not wish to go."

He shrugged his shoulders and turned away. She took a step nearer.

"To cut them?" she asked, in a hushed voice.

Again the uncanny quiver shook him.

"Yes, what else? You don't expect me to pull them up by the roots, do you?"

She looked up at the stately height of the tree beside her, rising massive and tall as a cathedral spire till it seemed to uphold the blue tent of sky, far above in the rift of the canyon. She shook her head. "You had better go away, man," she said, calmly. "They will never let you. I have lived with them for years, and I know them. Go away before they show their strength." Derringer stood still for a moment, then hastened off to camp with an uneasy beating in his usually placid heart. The mad woman—for mad she undoubtedly was—moved his imagination strangely. The Dryad turned, slowly retraced her steps to the sequoia, stepped inside the hollow at its roots, and disappeared. Later in the evening Derringer saw a thin line of smoke climbing upward along the rough bark walls of her dwelling. Evidently the tree was her home.

The timber contractor, though "green," was no tenderfoot. He knew enough of the surprises of California life to expect strange things of the people he encountered—dwellers up inaccessible canyons, or on the edge of the sage brush deserts. He had met hoary old men a hundred miles from civilization who talked Emerson and Plato with him, and had encountered more than one beautiful and refined woman recluse, ruling a tiny ranch in the very heart of the coast range. But this woman, whom he could not help calling "The Dryad," was a new and disconcerting type. However, he was bodily tired that night and so slept and forgot.

The next morning, bright and early, the great 15-foot, flexible steel saws were uncrated, the finest redwood tree was surrounded by a scaffolding some 20 feet from the ground, and the work of destruction was begun in earnest. Derringer thought no more of the strange woman or her predictions. But at noon, when the men rested, ate their bacon and hardtack, drank bad whisky and water, and swapped stories, they were suddenly arrested by the appearance of the gaunt, dark figure. This time she did not wait to be addressed, but walked with majestic languor to within earshot.

"Men," she said in her clear, musical Castillian, "you are in danger—go your ways and do not tempt your betters to destroy you. For centuries they have lived. Do you dare to threaten their existence?—if so, beware! I know them, and I know their will."

She waited for no response, but turned, with the slow, strong, graceful motion that characterized her, and disappeared in the direction of her tree. The half-breeds looked after her in surprise, took a fresh drink all around and returned to their talk. But Derringer could not. He had experienced for the second time that ungovernable fear, that creeping of the flesh that unnerves a man. He swung himself from the platform to the ground and followed the retreating figure. He saw her enter the gaping cavern in the heart of the sequoia, and a few moments later noticed the same thread of blue smoke proceeding from an opening in the bark, where, doubtless, she had improvised a chimney. He longed to cross the narrow barrier of the stream and enter this unusual dwelling, but a sense of impropriety held him back. After all she was a woman, this forest giant was her boudoir, and the habit of his youthful training was still strong upon him.

That was the beginning. From that day forward he knew no peace. Every day at the noon hour the Dryad came, calm and unmoved as the speaking statue, to deliver her warning, and daily the men lost their indifference and grew more troubled at her coming. When the dinner hour approached they scattered instead of "climbing" on the scaffoldings. They looked over their shoulders hurriedly as they went, and gave the smoking sequoia a wide berth. In addition to the superstitious terrors to which he now found himself a victim, there was added the more definite anticipation of desertion among his woodmen. He tried to drown their whispered councils by cheery banter, but his own heart misgave him.

A week passed and nothing happened save the daily visits of the Dryad, and the completion of the dissection of the redwood. The wire ropes had been staked and drawn taut, the winders were set up at a safe distance to avoid the possible spring of branches, and another day would see the fall of the first cut redwood of his claim. Derringer breathed more freely, for the Dryad did not come at midday. Perhaps she had given up the fruitless bluff. But at twilight when the canyon was already full of the blue-black mystery of night, and the rush of the little stream sounded loud and unceasing, she stood suddenly before him, framed in the door of his little shack.

"Senor," she said, "this is the last warning—go!"

She disappeared as if by magic, and Derringer's heart lay cold in his breast. He shivered, rose, looked out at the blackness of the shadows, listened to the magnified roar of the little river, and tried to shake off the oppression of impeding evil—but anyhow the warnings of a mad woman. That night there were strange creakings in the forest and sounds at times of stretched cables and sinister cracklings. But the lumbermen thought of the doomed redwood and turned to more solid slumbers on their primitive beds.

Suddenly out of the night came a scream as of ten thousand demons, a rending and tearing as of an earthquake, a blow that shook the hills and echoed down the stony mountain walls. Then the silence grew and swallowed the vain tumult. Dawn showed the cleft redwood still standing in its cables, ringed by its plank platform, but the men who planned its destruction were not there to complete the work. They lay crushed in their frail plank shanties, under the great sequoia.

Only the Dryad was there to see how its heart had been eaten out by the devouring fire, until the chamber at its base had become but a ring of bark. There was no one to tell of the patient vengeance of the half-witted priestess of the trees. But she, draped in her tattered Spanish finery, damp with the night's dews, only shook her head wisely at the ruin about her, and calmly took her solitary way through the unbroken silence of the canyon in search of a new home.—Town and Country, New York.

GOLD BENEATH THE OCEAN.

Rich Submarine Deposits Off the Shores of Cape Nome and Efforts to Obtain Them.

The question of mining the gold deposits under the tidal waters off Cape Nome has been revived through the accidental lifting of some gold-bearing mud on the fluke of the anchor of a steamer riding off shore. It is well established that the gold-bearing stratum which was so productive along Nome beach continues indefinitely under the sea. The problem as yet unsolved is: How shall it be reached?

Dredging seemed at one time to be the only reasonable solution. Some venturesome speculators invested large sums of money in dredges hoping to secure a prize through their agency. But the heaving of the sea and the frequency of rough weather made dredging with any appliance introduced there impossible. The dredger wrecked itself in unsteady water. Every investment in such machines there has since been counted a dead loss, says the Chicago American.

Later on an attempt was made to prospect this submarine deposit in the winter season. Advantage was taken of the fact that the sea freezes solid to the ground for some distance from the beach. Shafts were sunk in the ice to the gold-bearing stratum. What measure of success followed this novel plan of submarine mining has not yet been made known.

The probabilities are that the intense cold which froze the sea water to a depth of 15 or 20 feet made it impossible to mine economically the ground lying under the ice sheet. The results have, at all events, not been sufficiently glowing to receive special mention in the reports from Nome.

The steamer Santa Ana, on whose anchor fluke the gold-bearing mud is said to have been brought to the surface, was moored in six fathoms of water, one and one-quarter miles from shore. In the mud brought up by the anchor were imbedded several small nuggets, the largest being worth a dollar. If this report is not a fairy tale of the sea, means will yet be found to reach the deposit.

Ground bearing so much wealth will be worked some way or other. As the ordinary dredger used for excavation in still water is unavailable for the purpose, some mechanical mind may invent one that will work without destroying itself in the open sea, in ordinary weather, at least.

Recently a deep sea dredger was constructed at large cost for deepening the South pass in the delta of the Mississippi. It is presumed that this machine will operate successfully in the heave of the sea, which is in evidence in South pass. If so the principle on which it has been built may be applied perhaps to a dredger which will successfully lift the submarine gold-bearing gravel at Cape Nome and win a fortune for its owners from the bed of the restless ocean.

If the auriferous gravel cannot be reached by any other means than dredging the cutting and lifting appliances must be so separated from the dredger that they can be operated without imparting to them the motion which the floating hull receives from the swell of the sea and roll of the waves. If that can be done, dredging for gold will be numbered in time among Cape Nome's industries.

SCULPTOR'S ODD EXPERIENCE

Mr. Proctor's Encounter with a Dickensian Character During a Sojourn in London.

Proctor, the sculptor, tells of an encounter with a truly Dickensian female during a sojourn in London, says the Chicago Record-Herald. She was the true "Mrs. Raddle," of Lant street; but since Mr. Proctor was in the habit of more or less paying his rent, she was Bob Sawyer's "Mrs. Raddle" in good humor.

Mr. Proctor is a late sleeper. It had been his habit to secure the services of some "trusty" to keep up a racket in the morning till he was compelled to get out of bed in order to secure peace. The sculptor got himself into "Chambers" and it fell to "Mrs. Raddle" to see that he arose in the morning. She found, after a short experience, that after she had awakened him, Mr. Proctor was in the habit of turning over and going to sleep again; so she changed her methods. One morning Proctor heard her call, in addition to her usual fusillade upon the door:

"Show a leg, sir, show a leg."

He was compelled to get up and meet the peremptory demand. He planted his foot just without the door; there was a feminine, staccato shriek and a hurrying of footsteps down the hall. The door was closed and Mr. Proctor went about his toilet.

After a time this female appeared at the door with the breakfast service. She stood with the tray in her hands and made a peculiar squat courtesy before him, and, dropping her eyes, remarked, deprecatively:

"Ho! Mr. Proctor. If honly yer'd a 'ad on a stockin', ye knauw!"

This formula never varied while the sculptor occupied the "Chambers."

New Source of Revenue.

One of the finest suggestions we have heard for raising the revenue of the country is that made by a correspondent in the Daily Mail, who asks: "Why not tax villa names?" It is really an excellent idea, and would be extremely well received by, among other people, the postman and the butcher's boy, who are nowadays harassed by trying to remember whether Melchizedek mansions are at the top end of the road or at the bottom.—Pall Mall Gazette.

SCIENCE AND INDUSTRY.

The foot of a horse is one of the most ingenious and unexampled pieces of mechanism in the whole range of animal structure.

Of the world's annual production of coal—650,000,000 tons—more than two-thirds is mined in the United States and Great Britain.

The strongest known wood is said to be lancewood; its tensile strength per square inch is 23,000 pounds—that is to say, that weight is required to tear asunder a piece of it one inch square.

Diphtheria germs survive at least 15 years. This has been proven in two cases of diphtheria in children who could have contracted the disease in no way except through playing with toys that had been stored 15 years in an old trunk.

A storage reservoir system, with a capacity for supplying water to 150,000 acres, nearly all of which is now desert land, is to be built by New York capitalists on the Verde river, 50 miles north of Phoenix, and at a cost of $2,000,000. A dam 386 feet long at its base, 1,250 feet at its crest and 150 feet high is to be constructed.

Another bird, believed to have become extinct, is the California condor, twice as large as the condor of the Andes. Its length was five feet, weight 25 pounds and spread of wings 12 feet. An egg of this bird is worth $2,000 to collectors, but none has been found for 17 years. Eggs of the golden eagle sell in San Francisco for $32 each.—St. Louis Globe-Democrat.

The bird fauna of Iceland is credited by Henry H. Slater with 103 species. Of these three are residents, 27 summer migrants, 21 occasional visitors and 18 rare stragglers. The land birds are few, including only seven residents and five that come in summer to breed. The great auk once resorted to the island, but the most interesting birds now probably are the northern wren, the great northern dive and the Iceland falcon. Singing birds are few.

DEATH RATES OF THE STATES.

Marion, Ia., the Most Healthful Town and North Dakota the Healthiest State.

The most healthful place in the United States to live in is Marion, Ia., according to reports received by the marine hospital service from 1,190 cities and towns having a population of 1,000 or more, says the New York Sun. There may have been a more healthful place than Marion, but if so, no official returns were received from it. Marion has a population of 4,102, and there were only six deaths in 1900, making the death rate the phenomenally low figure of 1.46 per 1,000. The average death rate in all the cities and towns was 17.47.

It appears from the compilation of the marine hospital service that the state having the best record for health last year was North Dakota, with a death rate of only 6.95 per 1,000 of population. By far the most healthful of the very populous states, however, was Iowa, the death rate being 11.17. Ohio, which made reports from towns aggregating a population of more than a million and a half, shows a death rate of only 14.84.

The notable reports of healthfulness, however, come from the northwestern and far western states. Minnesota, the Dakotas, Nebraska, Kansas, Iowa, Idaho and Montana all have exceedingly low death rates. On the other hand, the states which are widely known as health resorts, such as Arizona, Colorado and California, have a comparatively high mortality, probably because many persons suffering from incurable pulmonary troubles go there and die. California last year had an average death rate of 17.63, Colorado, 25.29, and Arizona, 32.28. The last named had the highest mortality of any state or territory in the union. New York state's mortality was 19.35.

The town in the United States having the highest ratio of mortality last year was Carlyle, Ill. The population was 1,874 and the number of deaths 100, making a death rate of 53.31. The most unhealthful of the very large cities was Washington, death rate 21.71. Baltimore's death rate was 21.02, Philadelphia's 19.38, Boston's 20.82 and Chicago's 14.68.

Social Rank of Cabinet Officers.

The social rank of each cabinet officer is reckoned according to his standing in the order of succession to the presidency, which is arranged according to the age of each executive department. The state department having been the first executive branch of the government created, the secretary of state is the official and social head of the cabinet and the first of its members to succeed to the presidency, in the event of the death of both president and vice president. If the president, vice president and secretary of state were all to die before their successors had been appointed the secretary of the treasury would become president, because his is the second oldest of the executive departments. This right to succession extends in turn to the secretary of war, attorney general, postmaster general, secretary of the navy, and lastly to the secretary of the interior. This gradation thus indicates the social rank of each cabinet officer in his own circle.—Ladies' Home Journal.

General Failing.

Woman Lecturer (addressing an audience on her favorite topic: "Woman"—I have never yet seen a beautiful girl on whose cheek sits the blush of dawn, but I felt the longing to embrace her and to kiss her on the lips—

Bass Voice (in the rear of the hall)—Same here! (Prolonged applause.)—N. Y. Times.

PUNGENT PARAGRAPHS.

School Board Inspector—"Who is it that sits idly by doing nothing while everybody else is working?" Bobby—"The teacher."—Glasgow Evening Times.

"Do you guarantee this goods not to fade?" "Absolutely! And if it does we will sell you new goods to match the changed color."—Indianapolis News.

Early Marriages.—Miss Budd—"Do you approve of early marriages?" Mrs. Malaprop—"Not too early. I should say not before high noon."—Philadelphia Bulletin.

Going Easy.—"He is dying very calmly," observed the physician, as he felt the pulse of the sufferer. "So like John," softly spoke the prospective widow. "He always was an easy-going man."—Baltimore American.

"I know of no rarer delight than to drink in this mountain air!" exclaimed the Colorado tourist, ecstatically. "Yew hain't tasted th' whisky they sell down tew th' Broken Bow saloune 'parently," replied the stage driver.—Boston Post.

Buster—"Ha, ha, ha! It is the funniest thing I ever heard." Wilter—"Ha, ha, ha!" Buster—"What are you laughing at?" Wilter—"At that funny story. I thought if I laughed, you know, you wouldn't have to tell it."—Boston Transcript.

A Wise Precaution.—Sportsman (to his wife, who is rather a wild shot)—"By Jove! Nelly, you nearly got us again, that time! If you are not more careful, I'll go home!" Old Keeper (sotto voce)—"It's all right, squire. Her bag is full of nothing but blank 'uns!"—Punch.

Mrs. Hiram Offen—"Have you any references from ladies you have worked for here?" Applicant—"Faith, Oi hov; from more'n a dozen o' them." Mrs. Hiram Offen—"O! then you have been in this country some time?" Applicant—"Six mont's, ma'am."—Philadelphia Press.

WHERE COURTSHIP IS GRIM.

Customs of Kidnaping and Murder Still Extant in the Caucasus.

The manners and customs of the people of the Caucasus have not changed to a great extent since the country was subdued by Russia. One of the relics of the good old times to which the Caucasians especially cling is the custom of kidnaping the women whom they desire to make their wives, says the London Mail.

Recently a case of this kind resulted in a tragic end. A prominent inhabitant of the little Caucasian town of Katuhagan, named Ismail Ogli Oki, tried to kidnap the sister of his best friend's wife while his friend was absent from home. The girl resisted his attempt to carry her off, aided by her married sister. The baffled lover drew his sword and inflicted dangerous wounds on both the ladies. At this moment his friend returned, and, enraged at finding what had occurred, killed Ismail on the spot. Then he cut off Ismail's head and carried it round to show the neighbors what a fearful revenge he had taken.

In the same district a young nobleman desired to marry the daughter of a neighboring landowner, and invited the girl with her parents to a grand ball given at his castle. During the evening he found an opportunity of decoying the girl into a secluded part of the house, where she was seized by his men and placed in a carriage. The prince joined her, and, in spite of the girl's entreaties, started out to drive to a place where they could be married without much delay.

The girl's father, on finding that his host had disappeared with his daughter, gave chase, and, being on horseback, overtook the carriage. He shot the nobleman without ado, and took his daughter home. The nobleman, however, had won her heart during the drive, and the girl was now reluctant to marry the man of whom her father approved, but the stern parent insisted on the wedding taking place at once. The bride appeared in the church, pale, but cool and collected. During the ceremony she drew a dagger and stabbed the bridegroom to the heart. Afterward she committed suicide.

Nansen's Prophecy.

In view of Peary's successful failure it is keenly interesting to read what Nansen writes about his chances of success two months before he was heard from. Peary was to employ the winter, along with the Eskimos, in making preparations for the expedition, and the Windward was to take them on board again next summer and carry them farther north. In accordance with this arrangement the Windward started for the place of rendevous last summer, but did not come back in the autumn, so that Peary's expedition, like Sverdrup's, can scarcely be heard of before August or September of this year. What Peary may have accomplished or may have a prospect of accomplishing it is of course difficult to forecast. I am inclined to regard it as a drawback to his scheme that he is in so great a degree dependent upon the Eskimos, who understand little or nothing of the objects of such an expedition, and whose actions are so largely determined by the mood of the moment. At the same time we may be certain that, however circumstances may shape themselves, Peary, with his incomparable energy and his many mental and physical resources, will achieve something of importance.—Leslie's Monthly.

He Knew.

Teacher—A man bought three pounds of meat for 36 cents, a can of tomatoes for eight cents and some potatoes for five cents. Now, what does that make?

Bright Scholar—Soup.—Chicago Tribune.

INDUSTRY & MECHANICS

THE COMPASS NEEDLE.

It Points to the Magnetic Pole, Not to the North Pole, as Most People Believe.

The compass-needle points north because practically the earth is a magnet, not differing essentially in its magnetic properties from a bar of magnetized steel, says American Notes and Queries.

It has two poles of greatest intensity, and, like most large steel magnets, there are several supplemental poles of lesser intensity. Just as the pole of one bar magnet attracts the end of another, so the magnet poles of the earth behave toward poles of the compass-needle, unlike poles attracting, and like poles repelling each other.

But it is not correct to say that the needle always points north; as a matter of fact there are but few localities on the earth where it does so, and even those are constantly changing.

An irregular line drawn from the mouth of the Orinoco river through the east coast of Hayti, Charleston, S. C., and Detroit, Mich., represents very nearly the line in which there is no variation at the present time.

In all places east of this line the north end of the needle swings slightly to the westward; in all places west of it to the eastward. At the mouth of the Columbia river the variation of the compass is about 22 degrees east; in Alaska it is from 40 to 60 degrees east; midway between New York and Liverpool it is about 35 degrees.

Of course there is a reason for this variation, and the explanation is that the needle does not point to the north pole, as so many people suppose, but to the magnetic pole, which is something entirely different.

The magnetic north pole is at present on or near the northwestern shore of Boothia peninsula, in the northern part of North America. Its position is constantly changing, and in the last 600 years it has moved about half the distance round the geographical pole.

During a period of 300 years, in which observations have been carefully made at the magnetic observatory in Paris, the variations have changed from 11 degrees, 20 minutes east of north to 22 degrees, ten minutes west.

In the United States the rate of the change in variation differs much in different parts of the country. In Washington state it changes at the rate of about seven minutes a year; in Arizona and New Mexico it is stationary; in the New England states it is from one to three minutes per year.

TREE PRODUCES RAIN.

Sometimes It Sheds Water Only Twice a Week, at Other Times Twice a Day.

A tree which produces rain is found in Mayobamba, a wild country of central Africa. The natives call it Tampazara-bomba-andaba-ponda, which means a tree which the good Lord has

THE RAIN-MAKING TREE.

placed at the disposal of those nations whom He loves.

This strange tree at first sight has nothing remarkable which distinguishes it from other trees, but a close examination made by the French explorer Duillsux reveals that the trunk and the branches of this tree are covered with an infinite number of pores, which open at a certain moment to let the liquid which has been absorbed by the roots fall down in the shape of rain. Its roots penetrate vertically and very deeply in the soil in search of water to supply the tree.

The rain produced by this tree is very irregular as to its amount of moisture. Sometimes it rains only twice a week, while at other times it rains three times a day.

An Automobile Bakery.

Consul Hughes thus describes a novel automobile invented in Germany for military use: "It will follow the regiments on the march and make fresh bread from the wheat obtained on the spot. There is mounted on an automobile car a mill with bolters and kneading troughs, all run by the same motor which runs the automobile. The oven is drawn along in the rear. The bran obtained serves as food for the cavalry horses. By this method 5,000 men can be fed daily."

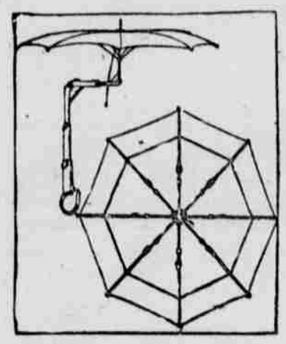
New Lime-Burning Process.

Lime burners at Rockland, Me., claim to have a new process by which a cask of lime is produced with 30 pounds of a cheap grade of coal. Wood has hitherto been used to get the best lime.

A WOMAN'S INVENTION.

Folding Umbrella Designed for the Especial Benefit of Cyclers and Automobilists.

Elma Etta Morrison, residing at Anthony, Fla., has been granted a patent on the folding umbrella shown in the illustration, the invention being intended principally for cyclers' use. When an ordinary umbrella is attached to the head of a wheel it is either too far forward to afford much protection or else lies in a slanting position. In the new umbrella this fault is overcome by the double angle formed in the handle, the elbows being strengthened by jointed braces to support the frame as rigidly as a straight stick. The lower portion of the handle is in three telescoping sections, and at the lower end is a steel clamping band by which the umbrella is attached to the handle-bar of the bicycle. The telescoping sections of the handle are se-



UMBRELLA FOR CYCLISTS.

curely fastened in an extended position by means of pins running through eyelets, the pins being secured by small chains to prevent loss. The ribs are jointed near the center, the inner ends being attached to the stick in the usual manner, while the outer section of each rib overlaps past the joint far enough to allow a sliding clip to secure it to the inner section. The clips are all connected by cords which join together near the stick and form a single rope extending down within reach of the rider, which enables him to release the ribs and fold the umbrella by a pull on the cord, the braces having been previously lowered on the stick to allow the ribs to drop, when the cover and ribs fold through the center. With the telescoping handle and jointed ribs the umbrella can be folded into small compass and suspended below the bar by loosening the clamping band.—St. Louis Globe-Democrat.

A TALK ABOUT ICE.

Some Facts and Comparisons Which Will Surprise Scores of Well-Informed Readers.

The college professor asked the rest of us whether ice was colder in winter than it was in summer. Now, to the rest of us, ice was ice, and therefore we could not see how it could remain ice and be either colder or warmer. Then the professor explained the thing in this fashion:

"If a thermometer is buried in ice in summer it will indicate 32 degrees. If you throw a piece of ice into boiling water, and leave it there until it is almost gone, what is left will be still at 32 degrees. Ice can never be gotten above that temperature.

"But while ice can never be warmed above 32 degrees, it will go as much below that as the weather does. An iceman delivering ice one zero day in January was asked whether his ice was any colder than in July. He thought not. But, as a matter of fact, a piece of summer ice, if he had had it, would have been something of a foot warmer for him, as it would have been 30 degrees warmer than the air of the bottom of his wagon.

"Mixing salt with ice makes it much cooler. The ice in a wine cooler goes down to about zero. This is why the point zero on our common thermometers was fixed where it is. It was supposed to be the lowest point which could be reached by artificial means. Since then we have reached about 383 degrees below zero by chemical processes.

"Ice will cool down with everything else on a cold night to zero or below. What should prevent it? On a day when it is just freezing a block of iron, a block of ice, outdoors will stay at 32 degrees. If the weather grows warmer the iron will warm up with the weather, but the ice will stay at 32 degrees and melt away. But if the weather grows colder the iron and the ice will cool off, and one just as much as the other.

"As the ice grows colder it gets harder and more brittle. There can be no hickory bend on a skating pond on a zero day, for ice is then too brittle. Slivers of ice dipped in liquid air become so hard that they will cut glass. Water thrown on ice in the arctic regions will shiver it like pouring boiling water upon cold glass. This is because the ice is so much colder than the water."—Beverages.

A Happy Idea from France.

"White coal" is the striking name given by a French paper to the force generating electricity by harnessed mountain streams. In California, at Niagara and the Soo the power of cataracts and rapids is already utilized. The white coal produces no smoke or ashes, and, after transforming water power into electrical energy, continues its journey to the rivers, lakes and sea. Even if black coal should be exhausted the white coal will last as long as clouds form and water runs from elevations. White coal broadens the field of manufacturing far beyond the limits of towns and cities, and there are writers who look to it for a happy revolution in the conditions of labor.